



[4910-13]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 21

[Docket No. FAA-2001-8994; Amdt. No. 21-96]

RIN 2120-AK19

### Type Certification Procedures for Changed Products

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is revising a final rule published on June 7, 2000 (65 FR 36244). In that final rule, the FAA amended its regulations for the certification of changes to type-certificated products. That amendment was to enhance safety by applying the latest airworthiness standards, to the extent practical, for the certification of significant design changes of aircraft, aircraft engines, and propellers. The existing rule requires the applicant show that the “changed product” complies with applicable standards. This action revises that requirement so that an applicant is required to show compliance only for the change and areas affected by the change. The intended effect of this action is to make the regulation consistent with the FAA’s intent and with the certification practice both before and after the adoption of the existing rule.

**DATES:** *Effective date:* This rule becomes effective [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

*Comment date:* Send comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Send comments identified by docket number FAA-2001-8994 using any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the online instructions for sending your comments electronically.
- Mail: Send comments to Docket Operations, M-30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue, SE., Room W12-140, West Building Ground Floor, Washington, DC 20590-0001.
- Hand Delivery or Courier: Take comments to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: Fax comments to Docket Operations at 202-493-2251.

*Privacy:* The FAA will post all comments it receives, without change, to <http://www.regulations.gov>, including any personal information the commenter provides. Using the search function of the docket web site, anyone can find and read the electronic form of all comments received into any FAA docket. This includes the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be found in the Federal Register published on April 11, 2000 (65 FR 19477-19478), as well as at <http://DocketsInfo.dot.gov>.

*Docket:* Background documents or comments received may be read at <http://www.regulations.gov> at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** For technical questions concerning this action, contact Victor Powell, Certification Procedures Office (AIR-110), Aircraft Certification Service, Federal Aviation Administration, 950 L'Enfant Plaza SW, Washington DC 20024; telephone (202) 385-6326; e-mail [victor.powell@faa.gov](mailto:victor.powell@faa.gov); or Randall Petersen, Certification Procedures Office (AIR-110), Aircraft Certification Service, Federal Aviation Administration, 950 L'Enfant Plaza SW, Washington DC 20024; telephone (202) 385-6325, e-mail [randall.petersen@faa.gov](mailto:randall.petersen@faa.gov).

For legal questions concerning this action, contact Douglas Anderson, Northwest Mountain Region–Deputy Regional Counsel (ANM-7), Office of the Chief Counsel, Federal Aviation Administration Northwest Mountain Regional Office, 1601 Lind Ave., SW Renton, WA 98057; telephone (425) 227-2166; facsimile (425) 227-1007; e-mail [douglas.anderson@faa.gov](mailto:douglas.anderson@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Authority for this Rulemaking**

The Federal Aviation Administration's (FAA) authority to issue rules on aviation safety is found in Title 49 of the United States Code. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes the scope of the FAA Administrator's authority.

This rulemaking is promulgated under the authority described in subtitle VII, part A, subpart III, chapter 447, section 44701. Under that section, Congress charges the FAA with promoting the safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the FAA Administrator finds necessary for safety in air

commerce. This regulation is within the scope of that authority because it will clarify existing requirements for an applicant's showing of compliance of an altered type-certificated product.

## **I. Overview of Final Rule**

The FAA has recognized over time the wording of current § 21.101 may establish a requirement for a compliance showing that is too broad for an applicant for a major design change. The current § 21.101(a) requires an applicant to show the “changed product” meets applicable airworthiness requirements.<sup>1</sup> The purpose of § 21.101 is to require an applicant to evaluate the proposed design change and its effect on the product rather than the re-evaluation (certification) of the entire changed product. Therefore, § 21.101 is amended to replace “changed product” with “change and areas affected by the change” to accurately limit the scope of compliance responsibility for the applicant. That change is also made in § 21.97 for the same reason.

## **II. Background**

On June 7, 2000, the FAA published a final rule entitled, “Type Certification Procedures for Changed Products” (65 FR 36244). In that final rule, the FAA revised the procedural requirements for the certification of changes to type-certificated products. The revision required the applicant to apply the latest airworthiness standards in effect, to the extent practical, for the certification of significant design changes of aircraft, aircraft engines, and propellers. Before this final rule, many changes to aeronautical products were not required to show compliance with the latest airworthiness standards. This rule was needed because incremental design approval changes accumulated into significant differences from the original product. The final rule was

---

<sup>1</sup> The term “product” is defined in § 21.1(b) as “aircraft, aircraft engine, or propeller.”

intended to expand under what conditions the latest airworthiness amendments needed to be applied to changes to aeronautical products.

#### A. Statement of the Problem

Section 21.101 requires that applicants show the “changed product” meets the applicable requirements to obtain an amended type certificate, supplemental type certificate, or amended supplemental type certificate. While the purpose of the rule was to enhance safety by requiring compliance with the latest amendments, we intended to limit an applicant’s responsibility to those areas affected by the change. Areas not affected by the change, as described in § 21.101(b)(2) need not be resubstantiated.

The preambles to the notice of proposed rulemaking (NPRM) (62 FR 24294, May 2, 1997) and the subsequent final rule entitled “Type Certification Procedures for Changed Products” (65 FR 36244, June 7, 2000) established parameters of an applicant’s responsibility for showing compliance with the latest amendments to the change and those areas affected by the change of a type-certificated product. However, the term “product” is defined in § 21.1(b) to mean “aircraft, aircraft engine, or propeller.” By requiring applicants to show the “changed product” meets applicable requirements, we inadvertently required the entire product be shown to meet at least the requirements that applied to the original type certificate. This was not our intent and was neither the FAA’s practice before the adoption of that rule, nor has it been our practice since its adoption.

#### B. Revision to the Regulation

The term “changed product” is replaced with “change and areas affected by the change” in §21.101 to be consistent with the rule language as established in § 21.101(b)(2) and (b)(3) and to clarify the responsibility of the applicant. The “change” refers to the design change proposed

by the applicant. “Areas affected by the change” refers to aspects of the type design the applicant may not be proposing to change directly, but that are affected by the applicant’s proposal. For example, changing an airframe’s structure, such as adding a cargo door in one location, may affect the frame or floor loading in another area. Further, upgrading engines with new performance capabilities could require additional showing of compliance for minimum control speeds and airplane performance requirements. For many years the FAA has required applicants to consider these effects, and this practice is unchanged by this rulemaking.

During efforts to revise § 21.101, the FAA discovered that § 21.97(a)(2), Approval of major changes in type design, contains similar language to § 21.101 in the case of a “changed product.” The FAA has therefore determined that § 21.97(a)(2) should also be changed by this amendment.

#### **IV. Regulatory Notices and Analyses**

##### **A. Regulatory Evaluation**

Changes to Federal regulations must undergo several economic analyses. First, Executive Orders 12866 and 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Public Law 96-354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Public Law 96-39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs,

benefits, and other effects of proposed or final rules that include a federal mandate likely to result in the expenditure by state, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this rule.

In conducting these analyses, the FAA determined that this rule: (1) has benefits that justify its costs, (2) is not an economically "significant regulatory action" as defined in section 3(f) of Executive Order 12866, (3) is not "significant" as defined in DOT's Regulatory Policies and Procedures, (4) will not have a significant economic impact on a substantial number of small entities, (5) will not create unnecessary obstacles to the foreign commerce of the United States, and (6) will not impose an unfunded mandate on state, local, or tribal governments, or on the private sector by exceeding the threshold identified above.

Department of Transportation Order DOT 2100.5 prescribes policies and procedures for simplification, analysis, and review of regulations. If the expected cost impact is so minimal that a proposed or final rule does not warrant a full evaluation, this order allows that a statement to that effect and the basis for it to be included in the preamble if a full regulatory evaluation of the cost and benefits is not prepared. Such a minimal cost determination has been made on this final rule because this requirement reflects current practices.

#### B. Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Public Law 96-354) (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to

explain the rationale for their actions to assure that such proposals are given serious consideration.” The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a final rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare an initial regulatory flexibility analysis as described in the RFA. However, if an agency determines that a final rule will not have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The net economic impact of this rule is expected to be minimal. As this rule is clarifying in nature, the acting FAA Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities.

### C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Public Law 96-39), as amended by the Uruguay Round Agreements Act (Public Law 103-465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such as protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. We



assessed the potential effect of this rule and determined that it will not constitute an obstacle to the foreign commerce of the United States, and, thus, is consistent with the Trade Assessments Act.

#### D. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (adjusted annually for inflation with the base year 1995) in any one year by state, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a “significant regulatory action.” The FAA currently uses an inflation-adjusted value of \$143.1 million in lieu of \$100 million. This rule does not contain such a mandate; therefore, the requirements of Title II do not apply.

#### E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. The FAA has determined that there is no new requirement for information collection associated with this final rule.

#### F. International Compatibility and Cooperation

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has reviewed the corresponding ICAO Standards and Recommended Practices and has identified no differences with these regulations.

Executive Order 13609, Promoting International Regulatory Cooperation, promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and to reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policies and agency responsibilities of Executive Order 13609, and has determined that this action would have no effect on international regulatory cooperation.

#### G. Environmental Analysis

FAA Order 1050.1E identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 312(f) of the Order and involves no extraordinary circumstances.

### **V. Executive Order Determinations**

#### A. Executive Order 12866

See the “Regulatory Evaluation” discussion in the “Regulatory Notices and Analyses” section elsewhere in this preamble.

#### B. Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of Executive Order 13132, Federalism. We determined that this action will not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, will not have Federalism implications.

#### C. Executive Order 13211, Regulations that Significantly Affect Energy Supply, Distribution, or

## Use

The FAA has analyzed this final rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). We have determined that it is not a “significant energy action” under the executive order and it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

## **VI. Additional Information**

### A. Comments Invited

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. The agency also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the amendments in this document. The most helpful comments reference a specific portion of the rulemaking, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments it receives, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking. Before acting on this rulemaking, the FAA will consider all comments it receives on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The agency may change this proposal in light of the comments it receives.

**Proprietary or Confidential Business Information:** Commenters should not file proprietary or confidential business information in the docket. Such information must be sent or delivered directly to the person identified in the FOR FURTHER INFORMATION CONTACT

section of this document, and marked as proprietary or confidential. If submitting information on a disk or CD ROM, mark the outside of the disk or CD ROM, and identify electronically within the disk or CD ROM the specific information that is proprietary or confidential.

Under 14 CFR 11.35(b), if the FAA is aware of proprietary information filed with a comment, the agency does not place it in the docket. It is held in a separate file to which the public does not have access, and the FAA places a note in the docket that it has received it. If the FAA receives a request to examine or copy this information, it treats it as any other request under the Freedom of Information Act (5 U.S.C. 552). The FAA processes such a request under Department of Transportation procedures found in 49 CFR part 7.

#### B. Availability of Rulemaking Documents

An electronic copy of a rulemaking document may be obtained by using the Internet—

1. Search the Federal eRulemaking Portal (<http://www.regulations.gov>);
2. Visit the FAA's Regulations and Policies Web page at [http://www.faa.gov/regulations\\_policies/](http://www.faa.gov/regulations_policies/); or
3. Access the Government Printing Office's Web page at <http://www.gpo.gov/fdsys/>.

Copies may also be obtained by sending a request (identified by notice, amendment, or docket number of this rulemaking) to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-9680.

#### C. Comments Submitted to the Docket

Comments received may be viewed by going to <http://www.regulations.gov> and following the online instructions to search the docket number for this action. Anyone is able to search the electronic form of all comments received into any of the FAA's dockets by the name

of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.).

### C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document, may contact its local FAA official, or the person listed under the FOR FURTHER INFORMATION CONTACT heading at the beginning of the preamble. To find out more about SBREFA on the Internet, visit [http://www.faa.gov/regulations\\_policies/rulemaking/sbre\\_act/](http://www.faa.gov/regulations_policies/rulemaking/sbre_act/).

### **List of Subjects in 14 CFR Part 21**

Aircraft, Aviation safety, Exports, Imports, Reporting and recordkeeping requirements.

### **The Amendments**

In consideration of the foregoing, the Federal Aviation Administration amends chapter I of Title 14, Code of Federal Regulations as follows:

### **PART 21—CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS**

1. The authority citation for part 21 continues to read as follows:

**Authority:** 42 U.S.C. 7572; 49 U.S.C. 106(g), 40105, 40113, 44701–44702, 44704, 44707, 44709, 44711, 44713, 44715, 45303.

2. In § 21.97, revise paragraph (a)(2) to read as follows:

### **§ 21.97 Approval of major changes in type design.**

(a) \* \* \*

(2) Show that the change and areas affected by the change comply with the applicable requirements of this subchapter, and provide the FAA the means by which such compliance has been shown; and

\* \* \* \* \*

3. In § 21.101, revise paragraphs (a), (b) introductory text, (b)(3), and (c) to read as follows:

**§ 21.101 Designation of applicable regulations.**

(a) An applicant for a change to a type certificate must show that the change and areas affected by the change comply with the airworthiness requirements applicable to the category of the product in effect on the date of the application for the change and with parts 34 and 36 of this chapter. Exceptions are detailed in paragraphs (b) and (c) of this section.

(b) Except as provided in paragraph (g) of this section, if paragraphs (b)(1), (2), or (3) of this section apply, an applicant may show that the change and areas affected by the change comply with an earlier amendment of a regulation required by paragraph (a) of this section, and of any other regulation the FAA finds is directly related. However, the earlier amended regulation may not precede either the corresponding regulation incorporated by reference in the type certificate, or any regulation in §§ 23.2, 25.2, 27.2, or 29.2 of this subchapter that is related to the change. The applicant may show compliance with an earlier amendment of a regulation for any of the following:

\* \* \* \* \*

(3) Each area, system, component, equipment, or appliance that is affected by the change, for which the FAA finds that compliance with a regulation described in paragraph (a) of this

section would not contribute materially to the level of safety of the product or would be impractical.

(c) An applicant for a change to an aircraft (other than a rotorcraft) of 6,000 pounds or less maximum weight, or to a non-turbine rotorcraft of 3,000 pounds or less maximum weight may show that the change and areas affected by the change comply with the regulations incorporated by reference in the type certificate. However, if the FAA finds that the change is significant in an area, the FAA may designate compliance with an amendment to the regulation incorporated by reference in the type certificate that applies to the change and any regulation that the FAA finds is directly related, unless the FAA also finds that compliance with that amendment or regulation would not contribute materially to the level of safety of the product or would be impractical.

\* \* \* \* \*

Issued in Washington, DC on November 21, 2012.

Michael P. Huerta  
Acting Administrator

[FR Doc. 2012-29276 Filed 12/03/2012 at 8:45 am; Publication Date: 12/04/2012]